

REMARKS

Claims 1-14 are pending in the case, and claims 1-14 are rejected.

SECTION 112 REJECTIONS

Claims 1-3 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Application regards as the invention. Claim 1-14 are considered indefinite because they recite broad recitations and narrower ranges/limitations for the same claim element.

Independent claims 1 and 14 have been amended to address the issue raised by the Examiner regarding a broad recitation of the claim element followed by a narrower statement of the range/limitation for the claim element. Applicant submits that claims 1 and 14, and their dependent claims 2-13, are now definite.

Claims 1-3 are rejected under §112 as being indefinite for failing to point out and distinctly claim the subject matter that the Applicant regards as the invention. Claim 1, as amended, clearly recites a dryer having various distinct claim elements and limitations, including the limitation of the air being forced to enter the drying drum via one or more air passage openings that are located in the cylindrical casing part of the drying drum. the Applicant submits that claim 1 is now definite as set forth. Claims 2 and 3 depend from claim 1 and further definitely recite additional elements of the claim. Therefore, claims 2 and 3 are also definite under §112.

SECTION 102 REJECTIONS

Claims 1-4 are rejected under 35 U.S.C. §102(b) as being anticipated by Chen et al. (U.S. Patent No. 5,899,005).

Section 102 of the Patent Statute requires that an anticipatory prior art reference disclose and teach literally each and every claim element recited in the claim. Claims 1-4 are all focused upon independent claim 1, and thus independent claim 1 is discussed with respect to the prior art.

The present invention is directed to a dryer that is more efficient in applying drying air to the items to be dried, such as linens and the like. The inventive dryer utilizes a unique combination of elements, not taught by the prior art, which provides such an efficient use of the air and ensures that a majority of the drying air penetrates the drying drum and a very small amount of air, if any, flows directly from an air inlet to an air outlet without entering the drying drum and being utilized. Furthermore, the present invention ensures that the majority of the drying air actually circulates around the drum and comes into contact with the items to be dried without passing through directly to an outlet before engaging the items and removing moisture therefrom.

To that end the present invention, as recited in claim 1, claims a dryer with a drying drum, a drive means to rotate the drum, a means to create airflow, and an air conduction means to lead the airflow through the drying drum. The dryer further comprises air conduction means including an inlet and an outlet. Claim 1 recites that the air is forced to enter the drying drum via one or more air passage openings, which are located in the cylindrical casing part of the drying drum. Such a limitation is clearly not taught by the Chen et al. reference, cited by the Examiner.

The dryer disclosed in Chen et al. does utilize a drum that is cylindrical in shape. However, that drum does not utilize air passage openings that are located in the cylindrical casing part. In fact, the Chen et al. patent itself states explicitly that it does not teach this limitation; it teaches the opposite.

As recited in lines 36-39 of column 2 of Chen et al.:

The drum 26 is generally cylindrical in shape, having an imperforate outer cylindrical wall 28 and a front flange or a wall 30 defining an opening 32 to the drum.

The dictionary definition of "imperforate" is having no opening or aperture, or lacking perforations. As such, the cylindrical wall 28 shown in Figure 1 of Chen et al. does not have any passages or openings in its cylindrical wall to allow for the passage of air. The only openings are those designated with reference numeral 36, which are in the rear wall 34 of the drum 26. There is no way that Chen et al. could anticipate claim 1 under §102(b) and particularly does not teach the limitation of the air being forced to enter the drying drum via one or more air passage openings that are located in the cylindrical casing of the drying drum. Accordingly, claim 1 is not anticipated under §102(b) and is allowable over the Chen et al. reference.

Claims 2-4 depend from claim 1 and further recite unique combinations of elements not taught by Chen et al. Thus, claims 2-4 are also novel and are not anticipated under §102(b) by the Chen et al. reference. Accordingly, claims 2-4 are also allowable.

Although claims 5-13 were not rejected under §102(b) over the Chen et al. reference, those claims are also in an allowable form. Specifically, claims 5-13 each depend from claim 1 and, thus, include all the limitations therein. For that reason alone,

they are allowable over the Chen et al. reference. However, claims 5-13 further recite unique combinations of elements also not taught and anticipated by the Chen et al. reference. Accordingly, claims 5-13 are also in an allowable form.

Claim 14 is an independent claim that recites a dryer that includes first and second sets of air passage openings, each located near one end of the drying drum in the cylindrical casing part and stretched like a band around the cylindrical casing. The Chen et al. reference does not show any air passage openings in the cylindrical part 20 of the drying drum. Rather, the outer cylindrical wall 28 of the Chen et al. drum is "imperforate." Accordingly, claim 14 is also not anticipated by Chen et al. and thus is allowable over that reference.

NEW CLAIMS 15-19

Pursuant to amending claim 1, claim 15 is an independent claim that recites a dryer including the limitation wherein one or more air passage openings are located at one axial end of the drying drum. Referring to the Figures of the present application, such a limitation is disclosed in the embodiment of Figure 6 wherein air passage openings 26 are located in the rear wall 23. While column 2 of the Chen et al. reference describes a rear wall 34 including a plurality of holes 36 that receive hot air, it is clearly shown in Figure 1 of Chen et al. that the plurality of holes are provided in the center of the rear wall and not at the outer circumference of the drying drum as recited in claim 15. In fact, it is not taught or even mentioned in Chen et al. that holes are provided near the outer edge or circumferential edge of the rear wall of the drying drum.

Accordingly, claim 15 and dependent claims 16-19 are all allowable over the Chen et al. reference.

Furthermore, Chen et al. teaches in a completely different direction and suffers from the drawbacks of the prior art mentioned in the Background section of the pending application. On page 2, paragraph 2 of the currently pending application, it is noted that some prior art dryers introduce air via a central hole in the back of the drying drum, which is the central area utilized in the Chen et al. As noted, although articles to be dried, such as linen, would move through the drying drum, such an embodiment has the disadvantage that a relatively large part of the air still flows freely through the drying drum without contacting the linen before it is withdrawn by the outlet. Accordingly, the deficiency of such a prior art drum is shown in Chen et al. as significantly inferior to the efficiency of the present invention.

Accordingly, new claims 15-19 are also in an allowable form. Claims 16-19 depend from claim 15 and recite unique combinations of elements not taught by Chen et al.

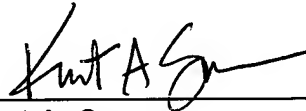
CONCLUSION

Applicant submits that the currently pending claims are in an allowable form and, therefore, requests a Notice of Allowability of the application at the Examiner's earliest convenience. If any issues remain in the case which might be handled in an expedited fashion, such as through a telephone call or an Examiner's Amendment, the Examiner is certainly encouraged to telephone the Applicant's representative or to issue an Examiner's Amendment.

Applicant knows of no fees due herein with this submission. However, if any charges or credits are necessary, please apply them to Deposit Account 23-3000.

Respectfully submitted,

WOOD, HERRON & EVANS, L.L.P.



Kurt A. Summe
Reg. No. 36,023

2700 Carew Tower
Cincinnati OH 45202
(513) 241-2324 (voice)
(513) 421-7269 (facsimile)